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08/067140

SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/067,140 05/25/93 HORI K HORI101AX

LEUBECKE EXAMINER

F3M1/1017

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ART UNIT PAPER NUMBER

13

DATE MAILED: 10/17/94

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☒ Responsive to communication filed on 8/2/94 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- ☒ Notice of References Cited by Examiner, PTO-892.
- ☐ Notice of Draftsman's Patent Drawing Review, PTO-948.
- ☒ Notice of Art Cited by Applicant, PTO-1449.
- ☐ Notice of Informal Patent Application, PTO-152.
- ☐ Information on How to Effect Drawing Changes, PTO-1474.
- ☐

Part II SUMMARY OF ACTION

1. ☒ Claims 25-31 and 34-49 are pending in the application.

Of the above, claims are withdrawn from consideration.

2. ☐ Claims have been cancelled.

3. ☐ Claims are allowed.

4. ☒ Claims 25-31 and 34-49 are rejected.

5. ☐ Claims are objected to.

6. ☐ Claims are subject to restriction or election requirement.

7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8. ☐ Formal drawings are required in response to this Office action.

9. ☐ The corrected or substitute drawings have been received on Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).

10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).

11. ☐ The proposed drawing correction, filed has been ☐ approved; ☐ disapproved (see explanation).

12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. ; filed on

13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14. ☐ Other

EXAMINER'S ACTION

Art Unit: 3302

1. Applicant's election with traverse of Group V, claims 25-31 in Paper No. 9 is acknowledged. The traversal is on the ground(s) that the search does not represent an excessive burden on the examiner. This is not found persuasive because, as pointed out in the requirement, a search for certain and distinct features in the endoscope art is burdensome for the examiner.

The requirement is still deemed proper and is therefore made FINAL.

2. The drawings are objected to because Figures 6 and 6B fail to show the specific structure which allows longitudinal movement of lens (126b) and photodetector (124) with the rotation of respective control rods as described in the specification on pages 26+. Any structural detail that is of sufficient importance to be described should be shown in the drawing. MPEP § 608.02(d). Figures 3, 3A, 7C, and 7D are further objected to because inner tube (56) (Figs. 3, 3A) and inner tube (not numbered) (Figs. 7C, 7D) are not adequately represented in the drawings. Correction is required.

3. The disclosure is objected to because of the following informalities: on page 17 of the specification, numeral (63) is used to represent both electrical signal path and optical train. Appropriate correction is required.

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4. The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to provide an adequate written description of the invention. The specification fails to disclose the exact manner in which the lens (126b) and photodetector (124) are moved along the longitudinal axis of the tube (122) (Fig.6,6B) in response to rotation of rods (123) and (129) respectively. The drawings lack the detail to explain the rotation-to-translation movement.

The specification is further objected to under 35 U.S.C. § 112, first paragraph, as the specification, as originally filed, does not provide support for the invention as now claimed. The specification fails to disclose the subject matter as now claimed in amended claims 25-31 and newly added claims 34-40. Specifically, no embodiment is described which requires a control rod coupled to a first lens and photodetector and a second control rod coupled to a second lens.

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5. Claims 25-40 are rejected under 35 U.S.C. § 112, first paragraph, for the reasons set forth in the objection to the specification.

6. Claims 42, 43, 44, 45 are objected to because of the following informalities: claim 42, line 5, --of-- should be inserted after "plurality"; claim 43, line 3, --to-- should be inserted after "relative"; claims 44 and 45, line 2, --to-- should be inserted after "relative". Appropriate correction is required.

7. Claims 44-49 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 44, "a first one of said first and second lenses" is indefinite since only a first and second lens is recited.

As to claim 45, "first lens" (line 2) is indefinite.

As to claim 48, "cavity" and "handle" lack antecedence.

As to claim 49, "handle" lacks antecedence.

Dependent claims where present inherit those defects.

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8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 41-45 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Sato et al. (U.S. Pat. 4,488,039).

Note the elements of Figure 1 which are disposed in the viewing head of an endoscope. It is taught that drivers DR1 and DR2 could be motor arrangements which would inherently require some kind of control element rod coupled to the motor.

10. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

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11. Claims 46-48 are rejected under 35 U.S.C. § 103 as being unpatentable over Sato et al. in view of Richards (U.S. Pat. 3,091,235).

Sato discloses the imaging system as described above and fails to disclose specifics of the remaining endoscope structure, particularly a plurality of fiber optic rods and an illumination assembly. However, it is conventional in the art to provide illumination optical fibers concentrically around the endoscope tube and a light source, disposed in the handle, and connected to the optical fibers, as shown by Richards (Fig.3). It would have been obvious to one of ordinary skill at the time the invention was made to have considered conventional endoscope structure in the absence of any particular teaching.

12. Claim 49 is rejected under 35 U.S.C. § 103 as being unpatentable over Sato et al. in view of Richards and further in view of Ohsawa (U.S. Pat. 4,905,668).

Sato et al., as modified above, discloses a power source (inherent) and a zoom control switch (manual control or operation unit (handle), col.2, lines 61-63). Since the focus control is automatic, Sato fails to disclose a manually operated focus control switch. However, it would have been within routine skill to have provided a manually operated focus control switch for the mere reason of compensating for a particular user. Furthermore,

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Ohsawa teaches that manual adjustment of focus could be equivalently used in place of automatic adjustment (col.22, lines 33-36). It would have been obvious to one of ordinary skill at the time the invention was made to have provided a manually operated focus control switch.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ono et al. (U.S. Pat. 4,444,462)--note Figure 6 which teaches adjusting magnification by moving slidable lens assembly (37) with control rod (39).

Nakajima et al. (U.S. Pat. 4,777,524)--note movable lens assembly for focusing, zooming, and magnification (Fig.1); also note Figure 13 wherein the CCD can be adjusted.

Lia (U.S. Pat. 5,222,477)--note movable CCD (Fig.6) for focusing.

Nishioka et al. (U.S. Pat. 4,807,026)--note teaching to move either or both the lens (2) and CCD (4) for focusing (col.6, lines 14-29).

Kawahara (U.S. Pat. 3,819,267)--teaches magnification varying means in combination with focusing adjustment.

Kimura (U.S. Pat. 4,846,155)--note Figure 14.

Tsuno (U.S. Pat. 4,620,769)--note Figure 2.

Okada (U.S. Pat. 4,558,691)--note focus adjustment.

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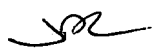
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Kinoshita et al. (U.S. Pat. 3,804,081)--note focus adjustment.

Wallace (U.S. Pat. 3,294,085)--note concentric fibers.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Leubecker whose telephone number is (703) 308-0951.


J. Leubecker
September 26, 1994


Richard J. Apley
Supervisory Pat. Exr.
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